City of Kingsburg
1401 Draper Street, Kingsburg, CA 93631-1908
(559) 897-5328

Holly Owen
Community Development
Director

AJ O'Connell
Building Official

Alexander J. Henderson
City Manager

BUILDING INFORMATION BULLETIN 2023-005

Effective Date: 8/7/2023

To: Architects, Licensed Design Professionals, General and Trade Contractors, Associations & Citizens of Kingsburg

Subject: City of Kingsburg One- and Two-Family Residential Photovoltaic Policies, Procedures, and Standard Plans

From: AJ O'Connell, MCP, CBO, CCEA – Building Official

Policy:

This information bulletin is published to guide applicants through a streamlined process of roof mounted solar photovoltaic (PV) projects for One- and Two-Family Residential properties. This bulletin provides information about submittal requirements for plan review, required fees, and inspections. This policy is intended for homeowners desiring to install Solar on their residential dwellings and Contractors or Installers intending to construct and/or design residential PV projects. Contractors are not eligible to use any provided Standard Plans or Specifications for City of Kingsburg Solar Permits, however this information may be helpful in obtaining a Solar Permit.

CONTRACTORS CAN USE SOLARAPP+ FOR FASTER ROOFTOP SOLAR PERMITTING

SolarAPP+ is an automated application for permitting new residential rooftop solar and storage systems that result in instantaneous permitting. SolarAPP+ lowers costs and expedites solar installations, encouraging property owners to invest in generating renewable and sustainable energy.

Effective August 7, 2023, ALL contractors must submit eligible PV projects in the SolarAPP+ system for an automated, instantaneous permit.

FOR MORE INFORMATION, CLICK HERE

1. **Approval Requirements**
   a. The following permits are required to install a roof-mounted solar PV system in One- and Two-Family Residential:
      i. Building Permit issued by the City of Kingsburg Building Division

Planning Review is ***NOT*** required for solar PV installations of this size.
Fire Department approval is ***NOT*** required for solar PV installations of this size.

2. Submittal Requirements

a. Completed Permit Application Form.

b. Demonstrate compliance with the Eligibility Checklist for expedited permitting for a PV system less than or equal to 10kw in size. **The Eligibility Checklist can be downloaded here**. Should the proposed system exceed the requirements in the Eligibility Checklist, it is not eligible for expedited permitting. Contractors are eligible for expediting permitting through the SolarAPP+ program and the eligibility criteria for online application submittals.

c. Electrical Plan. The Standard Electrical Plan may be used for proposed solar installations 10kW in size or smaller. Contractors are not permitted to use the City Standard Electrical Plan and must submit all documents using SolarAPP+.

If the Standard Electrical Plan is not used or provided, or the project does not adhere to the Standard Electrical Plan, an electrical plan must be submitted that includes all of the following:

- *Locations of Main Service or utility disconnect. This information can be shown on a site plan of the property;*
- *Total number of modules, number of modules per string, and the total number of strings;*
- *Make and model or inverter(s) and/or combiner box if used;*
- *One-line diagram of system;*
- *Specify grounding/bonding, conductor type and size, conduit type and size, and number of conductors in each section of conduit.*
- *If batteries are to be installed, include them in the diagram and show their locations and venting;*
- *Equipment cut sheets including inverters, modules, AC and DC Disconnects, combiners, and wind generators;*
- *Labeling of equipment as required by CEC Sections 690 and 705;*
- *Site diagram showing the arrangement of panels on the roof or ground, north arrow, lot dimensions, and the distance from property lines to adjacent buildings/structures (existing and proposed).*

Downloads:
Standard Electrical plan for Central String Inverter Systems
Standard Electrical plan for Microinverter and ACM Systems

d. A roof plan showing roof layout, PV panels, and the following fire safety items: approximate location of roof access point, location of code-compliant access pathways, PV system fire classification, and the location of all required labels and markings. Examples of clear access pathways are available in the State Fire Marshall Solar PV Installation Guide. **http://osfm.fire.ca.gov/pdf/reports/ solarphotovoltaicguideline.pdf**.

e. Completed Expedited Structural Criteria, along with any required documentation.

The Expedited Structural Criteria Form can be downloaded here.

For non-qualifying systems, provide structural drawings and calculations stamped and signed by a California-licensed civil or structural engineer, along with the following information:

- The type of roof covering and the number of roof coverings installed;
- Type of roof framing, size of members, and spacing;
- Weight of panels, support locations and method of attachment;
- Framing plan and details for any work necessary to strengthen the existing roof structure;
- Site-specific structural calculations;
- Where an approved racking system is used, provide documentation showing manufacturer of the rack system, maximum allowable weight the system can support, attachment method to the roof or ground, and product evaluation information or structural design for the rack system.

f. *Owner-Builders Only* Evidence of Electrical Safety Training per NFPA70E-2012 or credentials for a Qualified Person(s) who will be performing the installation of the PV System. If applicable, a list of subcontractors shall be provided prior to permit issuance.

3. Plan Review

a. Permit applications for qualifying systems for ***applicants other than Contractors*** can be submitted electronically via email in PDF format at buildingplanning@cityofkingsburg-ca.gov.

b. Permit applications for qualifying systems for ***Contractors as applicants*** are required to use the City of Kingsburg's online, automated Solar Permitting Platform at https://solarapp.nrel.gov/installers/learn_more and clicking on "Register" at the upper right or using the City's self-service permitting kiosk at 1401 Draper St, Kingsburg, CA 93631 during City business hours.

c. Permit applications utilizing the Standard Plan may be approved "over-the-counter" depending on staff availability. Permits utilizing the Standard Plan not approved "over-the-counter" will be reviewed in 1 to 3 business days after the date of submittal, per the City of Kingsburg's adopted Solar Permitting Ordinance. Permit applications that are ***NOT*** proposing to use the City of Kingsburg Standard Plans will be reviewed in order that they are received and are typically completed within 3 to 5 business days after submittal.

4. Fees

a. The permit applicant must provide an accurate valuation at the time of submittal. The valuation must reflect a fair market estimate of the total value of the work, including materials and labor. If, in the opinion of the Building Official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show a detailed estimate to meet the approval of the Building Official. Final building permit valuation shall be set by the Building Official.

Base Permit Fee Calculation

Valuation Threshold	**Permit Fee**
$1.00 to $500 Total Valuation	$23.50
$501 to $2,000 Total Valuation	$23.50 for the 1st $500 + $3.05 for each additional $100

$2,0001 to $25,000 Total Valuation	$69.25 for the 1st $2,000 + $14 for each additional $1,000
$25,001 to $50,000 Total Valuation	$391.75 for the 1st $25,000 + $10.10 for each additional $1,000 up to $30,767 total valuation. Thereafter, permit fee will be $450 up to 15kW +$15 for each additional kW above 15kW*
$50,001 to $100,000 Total Valuation	$450 up to 15kW +$15 for each additional kW above 15kW*
$100,001 to $500,000 Total Valuation	$450 up to 15kW +$15 for each additional kW above 15kW*
$500,001 to $1,000,000 Total Valuation	$450 up to 15kW +$15 for each additional kW above 15kW*
$1,000,001 and Up Total Valuation	$450 up to 15kW +$15 for each additional kW above 15kW*

*AB 1414 Compliance

b. The final fees will include a Plan Check fee, state-mandated Strong Motion and Building Standards Commission fees, and Technology Fee.

c. SolarApp+ applicants will need to set up a Stripe account to pay all permit fees. SolarApp+ applicants will incur the above fees – minus the Plan Check fee – in addition to a SolarApp+ convenience fee and a processing fee for using the Stripe collection program. These added amounts will vary depending on the cost of the permit.

5. Permit Issuance

Per *California Electrical Code* Section 690.4(C), only Qualified Personnel may perform the installation of Solar. Should Owner-Builders desire to install their own Solar, they must provide evidence of Electrical Safety Training per NFPA 70E-2012 at the time of permit application submittal. If the Owner-Builder is using licensed contractors to construct the project, a list of contractors must be provided at the time of permit issuance. Owner-Builders shall ***NOT*** use unlicensed contractors. For further information on the requirements for Owner-Builders, please visit the California Contractor's State License Board website at https://www.cslb.ca.gov/Consumers/Building_Officials/Owner_Builder_Overview.aspx.

6. Inspections

Once all permits to construct the solar installation have been issued and the system has been installed, it must be inspected before final approval is granted. On-site inspections can be scheduled by contacting the City of Kingsburg Building Division by telephone and 559-897-6526. Inspection requests received prior to 4pm, Monday through Friday, are typically scheduled for the next business day.

The following information must be provided in the inspection request message:

- Permit Number (for example, 2023000123),
- Jobsite Address,
- Type of Inspection Requested,
- Day (Date) you are requesting the inspection,
- Leave the Jobsite contact person's phone number in case the inspector needs it,
- Any special instructions such as lockbox information, etc.

- You may request AM or PM. Inspections are performed between 9a-1p during spring and summer, and 10a-2p in fall and winter. Contact the Building Division for more information.

The City of Kingsburg only requires a Building Final inspection for eligible projects. If a main service panel upgrade is required, a separate Meter Release inspection by the City of Kingsburg may be required by PG&E.

Permit holders must be prepared to show conformance with all technical requirements in the field at the time of inspection. The inspector will verify that the installation is in conformance with applicable code requirements and with the approved plans. All permits and approved plans must be on-site for the inspector to verify.

The inspector will utilize ground-level, ladders, and Unmanned Aerial Vehicles (UAV) for the inspection. Please refer to *Information Bulletin 2023-003* for the City of Kingsburg's Ladder Policy and *Information Bulletin 2023-004* for the City of Kingsburg's UAV Policy..

The following provides an overview of common points of inspection that the applicant should be prepared to show compliance:

- Number of PV modules and model number match plans and specification sheets number match plans and specification sheets;
- Array conductors and components are installed in a neat and workman-like manner;
- Exposed Array conductors are properly secured, supported, and routed:
- PV array is properly grounded;
- Electrical boxes are accessible and connections are suitable for the environment;
- Working space for service equipment meets minimum requirements;
- Array is fastened and sealed according to the attachment detail;
- Conductor's ratings and sizes match plans;
- Appropriate signs are properly constructed, installed, and displayed, including the following:
  - Sign identifying PV power source system attributes at DC disconnect;
  - Sign identifying AC point of connection;
  - Sign identifying switch for alternative power system.
- Equipment ratings are consistent with application and installed signs on the installation, including the following:
  - Inverter has a rating as high as max voltage on PV power source sign;
  - DC-side overcurrent circuit protection devices (OCPDs) are DC rated at least as high as max voltage on sign;
  - Switches and OCPDs are installed according to the manufacturer's specifications (i.e. many 600VDC switches require passing through switch poles twice in a specific way);
  - Inverter is rated for the site AC voltage supplied and show on the AC point of connection sign;
  - OCPD connected to the AC output of the inverter is rated at least 125% of maximum current on sign and is no larger than the maximum OCPD on the inverter listing label;
  - Sum of the main OCPD and the inverter OCPD is rated for not more than 120% of the bus bar rating.

7. Departmental Contact Information

For additional information regarding this permit process, fees, and inspections for One- and Two-

Family Residential Solar, please consult the Building Division website at https://www.cityofkingsburg-ca.gov/149/Building-Department or contact the Building Division at 559-897-5328.